## **Reclamation Project Ramganga**



## **Background**

River Ramganga originates from Pauri Garhwal and enters Uttar Pradesh at Moradabad, flowing through Rampur, Bareilly, Badaun, Shahjahanpur and Farrukhabad before joining the Ganga in Hardoi. The river keeps on changing course v frequently, causing heavy erosion and mass sand deposition on fertile lands along its banks. Very often flash floods occur in the catchments of its older paths, and water stagnates for 10-15 days at a stretch, causing heavy damage to standing crops.

With the passage of time, such affected areas got covered with dense shrubs like Moonj, Narkul, Sarpat, Sarkanda etc. As a consequence, about 56800 ha of land of 355 villages became barren with little or no cultivation. Locally the affected area is called *Katri* area. Over time, the affected area has gradually converted into



wasteland and the occurrence of perennial weeds has stopped agricultural activities. Most often such areas harbour anti-social elements.

In 2006, the Police Department, Govt. of UP suggested to the Department of Agriculture that the *Katri* areas be taken up for land reclamation and turned into cultivated land so that hide-outs of anti-social elements could be weeded out.

This was the genesis of the project for development of *Katri* lands in the districts of Bareilly, Shahjahanpur, Badaun, Rampur, Hardoi, Farrukhabad, and Moradabad.

## **Objectives & Intervention**

The project had the following objectives:

- To bring the affected area under crop cultivation
- To generate employment opportunities in the project area with flood control measures
- To improve the socio-economic condition of the farmers in the area.
- To ensure capacity building of beneficiaries through training and crop demonstrations
- To restore law and order in the affected areas.

The project was proposed to be taken up in phases and the project areas were to be selected on the basis of severity of problem in the area. Areas where scheduled caste/scheduled tribe farmers, small/marginal farmers and women farmers are in majority were to be given priority while selecting the project area.

A pilot project was implemented during 2008-09 & 2009-10 in Shahjahanpur & Bareilly in which 806 ha of land was reclaimed at a project cost of Rs 2 crores.







The process of land reclamation was initiated with the mechanical removal of perennial shrubs and leveling of affected land. The intervention also involved construction of contour bunds, peripheral bunds and check dams, spur or retaining walls, construction of embankment and link roads, provision of irrigation facilities and finally, demonstrations of crop, horticulture, forestry and agroforestry. Crop production activities have been started in both Kharif & Rabi seasons.

During the first year 2009-10 about 10705 hectares of such problem areas were reclaimed with a provision of Rs 23.00 crores and the reclaimed lands were brought under cultivation in coming Rabi season (2010-11).



All the farmers and labourers in the project area are beneficiaries of this scheme. Local administration in the district is responsible for getting the area surveyed and for allotment to farmers as per entries in the revenue records.

The total area reclaimed under this RKVY intervention in seven districts is 23215 ha out of an identified problem area of



64832 ha (up to 2010-11) involving a total investment of Rs 50 crores.

## Outcome

Out of total treated area of 23215 ha in the Katri areas, about 17087 ha area has been brought under agriculture. Cropping intensity has increased from 35% to 180%. Crop rotation in the treated area includes maize and mustard, urad and wheat, maize and lentil, sugarcane, and single crops. There has been significant increase in the income levels of farmers as well as three times enhancement in the value of land. Additional employment generation has been achieved with reduced anti-social activities.

Productivity enhancement in the project area has been impressive. Maize output after treatment was 18.20 qtl/ha, wheat 33.40 qtl/ha, lentil 10.35 qtl/ha, mustard 10.45 qtl/ha, and sugarcane a whopping 675 qtl/ha against the pre-treatment yields of 4.6 qtl/ha, 8.5 qtl/ha, 5.8 qtl/ha, 6.5 qtl/ha and 124 qtl/ha respectively. In percentage terms, the increase is 295 for Maize, 292 for Wheat, 78 for Lentil, 60 for Mustard and a whopping 444 for Sugarcane as compared to the pre treatment levels of production.

Allotment of land in Katri area as per revenue records is being completed. Since the area is prone to flood, there is a need to promote community participation for protecting the embankments, regular monitoring of progress and dovetailing of support through other schemes for sustainability of cultivation in the area, after withdrawal of Govt. support.

Ecological enhancement and natural resource management as done in the *Katri* area of Ramganga River would play a significant role in the state's plan to double food production in the next two years.